

Claims

1. A recombinant Fel d 1 fusion product comprising a Fel d 1 chain 1, a Fel d 1 chain 2 and a linker selected from a carbon-nitrogen bond or a short peptide linker which links the
5 N-terminal amino acid of one chain to the C-terminal amino acid of the other chain.
2. A fusion product as claimed in claim 1, wherein the linker links the N-terminal amino acid of the chain 1 to the C-terminal amino acid of the chain 2.
- 10 3. A fusion product as claimed in claim 1 or 2, wherein the linker is a carbon-nitrogen bond.
4. A fusion product as claimed in claim 1 or 2, wherein the short peptide has from 1 to 9 amino acid residues, preferably from 1 to 5 amino acid residues and particularly preferably
15 from 1 to 3 amino acid residues.
5. A fusion product as claimed in any preceding claim, wherein the linker comprises a target site for a reagent capable of selective cleavage of the linker.
- 20 6. A fusion product as claimed in claim 5, wherein the reagent is an enzyme.
7. A fusion product as claimed in any preceding claim, wherein the chain 1 and the chain 2 are covalently bonded together by one or more disulfide bridges into an antiparallel arrangement.
- 25 8. A fusion product as claimed in any preceding claim, wherein the Fel d 1 chain 1 comprises a sequence of SEQ ID NO 1, or a homologue or fragment thereof which provides substantially the same allergenic properties as SEQ ID NO 1.
- 30 9. A fusion product as claimed in any preceding claim, wherein the Fel d 1 chain 2 comprises a sequence of SEQ ID NO 2, SEQ ID NO 3, or a homologue or fragment thereof

which provides substantially the same allergenic properties as SEQ ID NO 2 or SEQ ID NO 3.

10. A fusion product as claimed in claim 8 or 9, wherein the homologue has greater than
5 90% homology, preferably greater than 95% homology and particularly preferably greater than 99% homology.

11. A fusion product as claimed in any preceding claim, comprising a sequence of SEQ
ID NO 4.

12. A homodimer consisting of two non-covalently associated fusion products as claimed
in any preceding claim

13. A DNA sequence encoding the fusion product as claimed in any of claims 1 to 11.

14. An expression vector having the DNA sequence as claimed in claim 13 inserted
therein in an operable form.

15. A host cell transformed with the expression vector as claimed in claim 14.

16. A pharmaceutical composition comprising an immunotherapeutically effective
amount of the fusion product as claimed in any of claims 1 to 11 and/or the homodimer as
claimed in claim 12 and a pharmaceutically acceptable carrier, excipient or diluent.

17. Use of the fusion product as claimed in any of claims 1 to 11 and/or the homodimer
as claimed in claim 12 for the preparation of a medicament for the treatment or prevention
of cat allergy.

18. A kit for the diagnosis of cat allergy comprising the fusion product as claimed in any
of claims 1 to 11 and/or the homodimer as claimed in claim 12 and instructions for use of
the kit.

19. A method for diagnosing cat allergy comprising the step of combining a sample taken from a subject with the fusion product as claimed in any of claims 1 to 11 and/or the homodimer as claimed in claim 12.

5 20. A process for preparing a fusion product as claimed in any of claims 1 to 11 comprising the step of culturing the host cell as claimed in claim 15 in a suitable medium.

21. A process for preparing a recombinant Fel d 1 polypeptide comprising the steps of synthesising the fusion product as claimed in claims 5 or 6 and selectively cleaving the
10 linker.